Amendments to the Specification

Please replace paragraph [0077] with the following amended paragraph:

[0077] In operation, the system of the present invention is summarized in the flowchart 70 of Fig. 7. In step 72, an ultrasound wave or pulse is transmitted toward a target, e.g., a bone, and the reflected signals are captured by two or more receivers in step 74. Based on the signals acquired from the receptors a determination is made as to whether the normal was found is made at step 76, which is made by a computer that directs, e.g., the articulated arm to either move the transducer or begin data acquisition. If the normal was found, then the final data from the target is acquired simultaneously in final data acquisition step 78, and the results stored as an analog signal or a digital equivalent. Based on the data acquired from the final acquisition step 78, the Emax and Emin are calculated at step 80 to determine the ultracritical reflectometry data of the target, from which the anisotropy may be calculated in step 82. Finally, the raw data, processed data and/or the calculated results may be stored, processed, displayed, printed and /or compared to earlier or later target data and calculations to provide the user with useful results at step 84.

Please replace paragraph [0078] with the following amended paragraph:

[0078] In Fig. 8, the ultracritical reflectometry data acquisition transducer, method and system are used in flowchart 90 to make a determination for treatment of a patient. In step 92, the normal is determined for bone, in this example at the heel. Upon acquisition of the normal, the transducer takes the critical UCR measurements. If the patient is concurrently or about to begin a treatment regimen, that occurs at step 96, with subsequent measurements taken at time-intervals (e.g., weekly, bi-weekly, monthly, depending on the physicians instructions and type of treatment) in step 98. Data from before patient treatment (step 94) and subsequent treatments (step 98) are acquired, processed and/or stored as patient data (step 100). The measurements, data and processed patient information is then compared at step 102 with normal patient data, and with the UCR measurements from the same or other treatments (step 104) from the same and/or other patients and a determination is made to see if the patient is improving at step 106. If the patient is improving then they may be returned to the bone scanning regime. If the patient is not improving or getting worse, then the physician can direct a change in treatment and the patient is returned to the monitoring regime (step 108).